

ABSTRACT

A transmitting system inserts runt abort packets in an outgoing data stream during idle time inter-frame time fill. The runt abort packets cause the receiving system to synchronize itself to the transmitting system so that even if an error during inter-frame time fill causes the receiving system to go into an erroneous state, the receiving system will be synchronized with the transmitting system before receiving valid data. In one embodiment, the transmitting system transmits data in packets over SONET. The packet data is scrambled at the transmitting end and descrambled at the receiving end. Runt abort packets sent during inter-frame time fill resynchronize the descrambler. If there is an error in the inter-frame time fill bytes, causing the receiving end descrambler to no longer be synchronized with the transmitting end scrambler, the runt abort packets will cause the descrambler to resynchronize state with the transmitting scrambler.